PAT-NO: JP357060717A

DOCUMENT-IDENTIFIER: JP 57060717 A

TITLE: QUARTZ OSCILLATOR UNIT

PUBN-DATE: April 12, 1982

INVENTOR-INFORMATION:

NAME

SHINODA, ISAO

ASSIGNEE-INFORMATION:

NAME COUNTRY

SEIKO INSTR & ELECTRONICS LTD N/A

APPL-NO: JP55134856

APPL-DATE: September 26, 1980

INT-CL (IPC): H03H009/10

US-CL-CURRENT: 310/344

ABSTRACT:

PURPOSE: To keep airtightness sufficiently without degrading the characteristics of a quartz oscillator, by providing a metallic layer consisting of Cr and Au layers on the surface and the reverse of the frame of a

tuning fork type quartz oscillator and setting the film thickness of Cr and Au

to 1,000∼3,000Å and ≥3,000Å respectively.

CONSTITUTION: Box-shaped vessels 2a and 2b, which hold a quartz oscillator 1

with frame between them, and sealing solders 3a and 3b which seal them tightly

are layered and are heated in a vacuum atmosphere, and sealing solders are

melted to seal them tightly. In this case, photoetching technique is adopted

for a metallized layer 11a of the frame part of the oscillator 1 and a frame

part 21a of vessels 2a and 2b, and a metallic layer consisting of an Au film

having ≥3,000Å and a Cr film having 1,000∼3,000Å which is

provided as the ground for enhancing the adhesive strength of the ${\tt Au}$ film is

provided as the protection film for this photoetching. Thus, a sufficient $% \left(1\right) =\left(1\right) +\left(1\right) +$

airtightness is obtained without degrading the characteristics of the quartz

oscillator.

COPYRIGHT: (C)1982,JPO&Japio